LIST OF CONTENTS

NUMBER 1

SPECIAL ISSUE

Muscle Fatigue in FES

Editorial
J Mizrahi 1

The Effects of Fatigue on the Torque-frequency Curve of the Human Paralysed Soleus Muscle
R K Shields and Y-J Chang 3

Fatigue in Human Thenar Muscles Paralysed by Spinal Cord Injury
C K Thomas 15

Surface EMG as a Fatigue Indicator During FES-induced Isometric Muscle Contractions
N C Chesler and W K Durfee 27

Detection and Prediction of FES-induced Fatigue
D Tepavac and L Schwirtlich 39

Muscle Fatigue in Interrupted Stimulation: Effect of Partial Recovery on Force and EMG Dynamics
J Mizrahi, O Levin, A Aviram, E Isakov and Z Susak 51

The Influence of Voluntary Upper Body Exercise on the Performance of Stimulated Paralysed Human Quadriceps
H M Franken, P H Veltink, M J IJzerman, F S Withaar and H B K Boom 67

NUMBER 2

The Relationships Between Movement-related Cortical Potentials and Motor Unit Activity During Muscle Contraction
M Shibata, S Oda and T Moritani 79

Normality and Stationarity of EMG Signals of Elbow Flexor Muscles During Ramp and Step Isometric Contractions
M Bilodeau, M Cincera, A B Arsenault and D Gravel 87

Consistency of Multi-channel Surface EMG Recordings: Application in Spinal Cord Injured Subjects
A M Sherwood, M M Priebe and D E Graves 97

The Effect of Muscle Length on Electrically Elicited Muscle Vibrations in the *in-situ* Cat Soleus Muscle
M A Vaz, W Herzog, Y-T Zhang, T R Leonard and H Nguyen 113

Extent of Muscle Inhibition as a Function of Knee-Angle
E Suter and W Herzog 123

A Validation of Techniques Using Surface EMG Signals from Dynamic Contractions of Quantify Muscle Fatigue During Repetitive Tasks
J R Potvin and L R Bent 131

Correspondence between the Directional Patterns of Hip Muscle Activation and their Mechanical Action in Man
M-H Dubois, U Herrman, D F Bourbonnais, A M Smith and D Gravel 141

Impaired Balance Control in Paraplegic Subjects
H A M Seelen, Y J M Potten, A Huson, F Spaans and J P H Reulen 149

Standards for Reporting EMG Data I

NUMBER 3

Stimulation Frequency History Alters Length-Force Characteristics of Fully Recruited Rat Muscle
B Roszek and P A Huijing 161

Cocontraction in Three Age Groups of Children During Treadmill Locomotion
G Frost, J Dowling, K Dyson and O Bar-Or 179

Myoelectric and Mechanical Changes Elicited by Ischemic Preconditioning in the Feline Hindlimb
D J Phillips, S G Petrie, B-H Zhou, C A Guanche and R V Baratta 187

Surface EMG Modifications After Eccentric Exercise
F Felici, L Colace and P Sbriccoli 193

An Analysis of Greyhound Gait using Wavelets
D B Marghitu and P Nalluri 203

Erratum I

Calendar III

NUMBER 4

SPECIAL ISSUE

Keynote Speeches from the 1996 ISEK Congress

The First Basmajian Lecture: Reflections on John V. Basmajian: Anatomist, Electromyographer, Scientist
S L Wolf 213

Volume Conduction Models for Surface EMG; Confrontation with Measurements
K Roeleveld, J H Blok, D F Stegeman and A van Oosterom 221

Principles of High-Spatial-Resolution Surface EMG (HSR-EMG): Single Motor Unit Detection and Application in the Diagnosis of Neuromuscular Disorders
G Rau and C Disselhorst-Klug 233

Surface EMG Signal Processing During Isometric Contractions
R Merletti and L R Lo Conte 241

Reflections on Clinical Gait Analysis
R B Davis 251

The Development of an EMG-Assisted Model to Assess Spine Loading During Whole-Body Free-Dynamic Lifting
W S Marras and K P Granata 259

Current Topics in Clinical Functional Electrical Stimulation in Japan
Y Handa 269

Calendar i